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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,880	01/31/2001	Marc John Payne	01435.0106	2061

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EXAMINER	
LAVILLA, MICHAEL E	

ART UNIT	PAPER NUMBER
1775	

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/772,880	PAYNE, MARC JOHN	
	Examiner	Art Unit	
	Michael La Villa	1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimberley et al. WO 99/46303 in view of Chang EPA 0 323 716 for the reasons of record in the Office Action mailed on 1 August 2003.

Response to Amendment

I. In view of applicant's amendments and arguments, applicant traverses the section 112, second paragraph rejection and claim objection of the Office Action mailed on 1 August 2003. These rejections and objections are withdrawn.

II. In view of applicant's amendments and arguments, applicant traverses the section 103 rejection over Kimberley in view of Chang of the Office Action mailed on 1 August 2003. Applicant argues that Kimberley does not teach forming alumoxanes in situ. Applicant does not claim forming alumoxanes in situ. Applicant teaches adding trialkylaluminum compound to water containing support. Applicant explains that alumoxane of the prior art was formed in advance and then combined with catalyst to form activated catalyst. However, Kimberley teaches adding alumoxane to support and then adding catalyst to the support and activating the catalyst. Applicant suggests that there is no teaching in prior art of adding water to a support since water is a poison. The support of Chang would not have water added to it per se. Rather, the support is not dried prior to adding trialkylaluminum so that alumoxane forms upon addition. Applicant argues that Chang refers to metallocene catalyst systems in contrast to the claimed systems. Applicant further argues that one of ordinary skill in the art would not look to metallocene technology to solve the problems of the claimed catalyst systems. These arguments are not persuasive. Both applicant's system and a metallocene system may be

activated by alumoxanes, as recognized by Kimberley and Chang. The method of Chang results in a support having alumoxane therein. One of ordinary skill in the catalyst art would clearly recognize this as a method of having alumoxane on a support. Kimberley teaches obtaining a support having alumoxane therein, prior to adding catalyst. In the examples and at page 9, line 27, for example, Kimberley teaches that catalyst components may be introduced sequentially. Whether alumoxane is added or whether alumoxane is formed in situ as taught by Chang would appear to be taught and/or suggested by the prior art. Applicant may traverse this conclusion on the grounds that any residual water after making alumoxane would be recognized as a catalyst poison. Hence to avoid the presence of such poison, one of ordinary skill would rather use a method that eliminates the possibility of residual water and add alumoxane directly and would not be inclined to use a method that may allow for the presence of water. However, it would appear to be a poison in a metallocene system as well and recognized as such in the prior art. The reaction between water and trialkylaluminum is characterized by Chang as highly favored. Hence, where the mole ratio of aluminum exceeds that of water, the amount of

residual water would be expected to be trivial. Furthermore, applicant's claim does not preclude water in the resulting support. Chang teaches optimizing the mole ratio of water and trialkylaluminum in forming alumoxanes. Applicant refers to specific disclosed examples that suggest unexpected results. However, it is unclear that such unexpected results are achieved over the breadth of the claimed invention. Rejections are maintained.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
5. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is

(571) 272-1539. The examiner can normally be reached on Monday through Friday.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael La Villa
March 28, 2004